

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

FINAL

Title V, Construction / Operating

Permit: V-06-041 R1

Publishers Printing Company

Shepherdsville, Kentucky.

May 09, 2008

Ibrahim AL-Burai, Reviewer

SOURCE I.D. #: 21-029-00019

SOURCE A.I. #: 469

ACTIVITY #: APE20080001

MINOR REVISION - V-06-041 R1

On February 26, 2008, the source applied to the Division for a revision to their Title V permit, V-06-041. The source has requested the following changes:

- Install a Hantscho Mark IV 6-Unit Web Offset Heatest Lithographic Printing Press (Press 405). The proposed Press 405 is similar in design and operation to the currently permitted Emission Point 01, Printing Press 437. The proposed Press 405 will use automatic blanket wash cleanup and a blanket wash solution with low VOC content.
- This project also includes the installation of a new CleanSwitch Regenerative Thermal Oxidizer (RTO). Press 405 will be interlocked with the new thermal oxidizer with a minimum 90% VOC designed destruction efficiency. As a result of this, Press 405 can physically not operate without the control equipment on-line. The VOC potential to emit (PTE) is, therefore, 7.95 tons/year. Concurrent with the addition of Press 405 and installation of the new RTO (CS-200), three existing presses (Presses 448, 450, and 470) will also be routed to and interlocked with the new RTO (CS-200). The existing CleanSwitch RTO (CS-250) will continue to serve the other existing seven presses. These three existing presses are currently routed to the existing RTO (CS-250); therefore, there is no decrease in potential emissions expected related to additional control.
- Remove EP-04 (Press 444) from the plant.

EPA REVIEW:

The U.S. EPA was notified of the issuance of the revised permit on June 24, 2008 via e-mail. The U.S EPA comment period expired 45 days from the date of the email. No comments were received during this period. Therefore, the permit is now being issued final.

SOURCE DESCRIPTION - V-06-041:

Publishers Printing Company is an offset lithographic paper printing plant which prints magazines. Printing takes place on ten offset lithographic presses each with a natural gas fired dryer. Insignificant activities consist of a waste paper cyclone and dust collector system, small hot melt gluers, ink jet printing and head cleaning, two magazine glueing machines, three cooling towers, three chillers, cold solvent cleaner, non process space and water heaters, propane tank (18,000 gallons), 39 Co Ray Vac Radiant Comfort heaters (40, 000 Btu/hr each, natural gas/propane), eleven (11) space heaters (Total 1.66 mmBtu/hr, three @ 80,000 Btu/hr, two 115,000 Btu/hr two @ 195, 000 Btu/hr and four @ 200,000 Btu/hr, natural gas/propane).

COMMENTS:

Permit V-06-041 allowed alternative operating scenarios, in which the source could operate the ten (10) presses using the existing condenser/filter system to control the VOC emissions until the installation and start –up of the new Meg TecSystems Cleanswitch CS-250-955 regenerative thermal oxidizer (RTO). The source has replaced the condensed/filter system with the RTO. The new RTO shall have following requirement.

1. The permittee shall retest the RTO at least once during the life of this new permit;
2. Each press and the control device shall be interlocked at all times during press operation;
3. Pursuant to 401 KAR 50:012, Section 1(2), the permittee shall operate the Regenerative Thermal Oxidizer (RTO) at all times printing is being performed;
4. RTO shall have 90% VOC destruction efficiency, controlling each press' dryer exhaust;
5. Negative pressure shall be maintained at each dryer's exhaust inlet when the corresponding press is in operation.

Type of control and efficiency

The source has Meg TecSystems Cleanswitch CS-250-955 regenerative thermal oxidizer (RTO) to control VOC emissions from all ten (10) presses.

Regenerative Thermal Oxidizer (RTO): MEGTEC "Clean Switch CS-250"

Destruction Efficiency:	99.5 % tested on May 28, 2002
Rated Capacity:	4.0 mmBtu/hr
Primary Fuel:	Natural Gas
Secondary Fuel	Propane

Emission factors and their source:

Emissions from the offset lithographic presses were calculated using the EPA document "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing".

Emissions from the natural gas dryers were calculated using AP42, 1.4. The insignificant activities were certified by the company as being insignificant.

Applicable Regulation:

The presses are not subject to an individual regulation, however, VOC emissions from Press 442 have a synthetic minor limit to preclude non-attainment area review based on earlier determinations. This will stay in place on this permit.

401 KAR 50:012, General application

401 KAR 59:185, New Solvent Metal cleaning equipment:

The cold solvent cleaner is exempt from the standard of 401 KAR 59:185 under Section 8.

Precluded Regulations:

401 KAR 51:052. Review of new sources in or impacting upon non-attainment areas

VOC emissions from Press Emission Point 3 (Press 442) shall not equal or exceed 40 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas